

[54] **METHOD TO AUTOMATICALLY VARY
DISPLAYED OBJECT SIZE WITH
VARIATIONS IN WINDOW SIZE**

[75] Inventor: Robert J. Torres, Colleyville, Tex.

[73] Assignee: IBM Corp., Armonk, N.Y.

[21] Appl. No.: 154,546

[22] Filed: Feb. 10, 1988

[51] Int. Cl.⁵ G06F 3/153; G06G 1/16[52] U.S. Cl. 364/521; 364/518;
340/721; 340/723; 340/750[58] Field of Search 364/518, 521, , 522;
340/724, 706, 731, 723, 747, 750, 798, 799;
382/47, 56[56] **References Cited****U.S. PATENT DOCUMENTS**

4,435,703 3/1984 Hunt et al. 340/723
 4,476,464 10/1984 Hobbs 340/731
 4,503,427 3/1985 Iida 340/731
 4,644,319 2/1987 Yamaguchi 340/731
 4,648,062 3/1987 Johnson et al. 364/900
 4,656,603 4/1987 Dunn 364/900
 4,700,320 10/1987 Kapur 364/521
 4,780,710 10/1988 Tatsumi 340/721
 4,847,788 7/1989 Shimada 364/522

Primary Examiner—Gary V. Harkcom*Assistant Examiner*—Phu K. Nguyen*Attorney, Agent, or Firm*—Richard E. Cummins; James H. Barksdale[57] **ABSTRACT**

A method to maintain all of the information that is originally displayed in a window on the display screen

in an interactive information handling system, as the size of the window is decreased. A plurality of character sets which have different appropriate width and height attributes are stored in the system. When the size of the window is decreased, a stored character set is selected based on the amount that the window is decreased. Characters from the selected set are then substituted for the corresponding text characters originally displayed. Since the selected character set contains proportionally smaller characters no information is lost. The method allows the operator to dynamically vary the window size, after the initial window has been displayed, by operator action, such as by movement of a mouse. Movement of the mouse in a generally horizontal direction with the button in the held position causes the horizontal window size to decrease. The amount of decrease is calculated in real time by monitoring the movement of the mouse and cursor position. A table is stored in memory which lists all of the displayable character sets that are available. Each character set has a width attribute and a height attribute. A percentage decrease in width and height is stored in the table representing changes from the corresponding attributes of the standard character set that is normally used to display information in the system. If the user sizes the window below limits of readability or system capability for resolution, the window components are replaced with a graphic representation of the data or with icons. If the user decides to restore the size of the original, a 1-step key or mouse button sequence is available.

14 Claims, 3 Drawing Sheets

CHAR. SET NAME	P'NTR	WIDTH	Z DELTA	HEIGHT	Z DELTA
DEFAULT CHAR SET	xAC00	9	0	14	0
FIRST CHAR. SET	x20AD	8	11%	13	9%
FIFTH CHAR. SET	x50CC	6	33%	10	30%
SIXTH CHAR. SET	x70FF	5	50%	7	50%